

### **Abstract of the Disclosure**

5           Pre-treatment with  $\alpha,\beta$  unsaturated aryl sulfones protects normal cells from the cytotoxic side effects of two classes of anticancer chemotherapeutics. Administration of a cytoprotective sulfone compound to a patient prior to anticancer chemotherapy with a mitotic phase cell cycle inhibitor or topoisomerase inhibitor reduces or eliminates the cytotoxic side effects of the anticancer agent on normal cells. The cytoprotective effect of the  $\alpha,\beta$  unsaturated aryl sulfone allows the clinician to safely increasing the dosage of the anticancer chemotherapeutic.